

PENDING CLAIMS

Claims 1-6 (previously cancelled)

Claim 7 (previously added): Safety brake climbing lanyard apparatus for climbing trees (T) or other vertically elongated objects having at least one lateral projecting obstacle (B) to impede further climbing, the apparatus comprising:

- a) an elongated, flexible lanyard line (L) having opposite ends and first and second
5 coupler members (54, 56) on said opposite ends,
- b) a hollow body member (12) having an open side, an opposite closed side 12'
and opposite open ends and supporting said flexible lanyard line (L) intermediate its ends as
first and second end segments (L', L'') extending to and through said opposite open ends of said
body member (12), the lanyard line segments each having a length sufficient to encircle an
10 object to be climbed,
- c) a brake cam assembly (16) mounted pivotally in said hollow body member
(12) and having opposite ends movable arcuately from an intermediate position disengaged
from the lanyard line to opposite end positions each alternately clamping a different one of said
lanyard line segments (L', L'') against the closed side (12') of the body member,
- 15 d) connector means (32) secured to the brake cam assembly (16) and projecting
outwardly of the open side of said body member for coupling to a connector (52) on a
climber safety harness (48),
- e) a safety harness (48) configured for removable attachment about a climber and

having spaced apart first and second connector members (50, 52), said second connector
20 member (52) being coupled releasably to said connector means (32) on said brake cam
assembly, and

f) the first and second detachable coupler members (54, 56) on the free ends of
the respective first and second end segments (L' L") of said lanyard line being configured for
releasable connection one at a time to said first connector member (50) on said safety
25 harness.

Claim 8 (previously added): The safety brake climbing lanyard apparatus of claim 7
wherein the pivotal mount comprises a removable pivot pin (36) configured to releasably
secure said brake cam assembly pivotally on said body member for selective removal and
reinstallation of the pivot pin and brake cam assembly (16) from said body member for
5 installation of the safety brake apparatus (10) onto the longitudinally extending flexible lanyard
line (L) intermediate its ends.

Claim 9 (previously added): The safety brake climbing lanyard apparatus of claim 7
wherein said opposite line-engaging ends of the brake cam assembly (16) are configured with
roughened surfaces arranged for increased frictional engagement with said lanyard line for
positive locking interengagement.

Claim 10 (previously added): The safety brake climbing lanyard apparatus of claim 7
wherein said opposite ends of the brake cam assembly and the closed end wall (12') and
opposite open ends of the body member are together configured for use with a rope-type
flexible lanyard line (L) having a substantially circular cross section of predetermined diameter.

Claim 11 (previously added): The safety brake apparatus of claim 7 wherein said opposite ends of the brake cam assembly and the closed end wall and opposite open ends of the body member are together configured for use with a strap type flexible lanyard line (S) having predetermined width and thickness dimensions.

Claim 12 (previously added): The safety brake apparatus of claim 7 wherein said connector means (32) is a rotary connector for rotatable coupling to said connector member (52) on the climber safety harness (48).

Claim 13 (previously added): The safety brake apparatus of claim 12 wherein the brake cam assembly (16) includes a pair of cam members (18,20) having confronting surfaces provided with registering diametric slot portions having an enlarged inner portion (26) and an outer portion (24) extending to the periphery of the cam members, means (22) for
5 detachably securing said cam members together with the registering slot portions forming a bore, and a rotary shaft (28, 30) matching the configuration of the bore and extending outwardly of the cam assembly and joined with said rotary connector means (32).

Claim 14 (previously added): The safety brake apparatus of claim 7 wherein the pivot means for securing said brake cam assembly (16) to said body member (12) comprises a pivot pin (36) detachably interconnecting said cam assembly and body member.

Claim 15 (previously added) The method of climbing a tree (T) or other vertically extending structure having a laterally extending obstruction (B) to continued vertical climbing, the method comprising:

- a) providing a climber with a safety harness (48) having first and second spaced

5 apart connector members (50, 52) secured thereto,

b) providing an elongated lanyard line (L) having first and second couplers (54, 56) on the opposite ends thereof,

c) providing a safety brake apparatus on said lanyard line (L) intermediate the opposite ends of said line dividing said line into opposite end segments (L' L'') eaching having a

10 length sufficient to encircle the structure to be climbed, said safety brake apparatus comprising:

1) a hollow body member (12) having an open side, an opposite closed side 12' and opposite open ends and supporting said flexible lanyard line (L) intermediate its ends as first and second end segments (L', L'') extending to opposite sides of said body member (12), the lanyard line segments each having a length sufficient to encircle an object to

15 be climbed,

2) a brake cam assembly (16) mounted pivotally in said hollow body member (12) and having opposite ends movable arcuately from an intermediate position disengaged from the lanyard line to opposite end positions each alternately clamping a different one of said lanyard line segments (L', L'') against the closed side (12') of the body

20 member,

3) connector means (32) secured to the brake cam assembly (16) and projecting outwardly of the open side of said body member for coupling to a connector (52) on a climber safety harness (48)

d) connecting said connector means (32) to said second connector member (52)
25 on said safety harness (48),

- e) encircling said structure (T) to be climbed with said first lanyard line end segment (L') and connecting said first coupler (54) on the end of the first lanyard end segment (L') to said first connector member (50) on said safety harness (48), whereby said first lanyard end segment is clamped to the body member (12) by the associated end of the brake cam assembly (16),
- 30 f) manipulating said first end segment (L') of the lanyard line upwardly on the structure (T) while climbing the structure until an obstruction (B) is encountered,
- g) encircling the structure (T) above the obstruction (B) with the second end segment (L'') of the lanyard line and connecting said second coupler (56) on said second end
- 35 segment (L'') to said first connector member (50) on the safety harness and detaching said first coupler (54) from said first connector member (50) to release the first lanyard end segment (L'),
- h) manipulating the second lanyard end segment (L'') upwardly on the structure above the obstruction (B) to continue upward climbing, and
- 40 i) repeating steps f), g) and h), for alternating lanyard end segments, as required, to reach a desired height on the structure.

Claim 16 (previously added): The method of using the apparatus of claim 7 for climbing trees and like structures having at least one laterally projecting obstruction to continued vertical climbing, the method comprising:

- a) mounting said safety harness (48) about the waist of a climber,
- 5 b) coupling said connector means (32) to the second connector member (52) on

said safety harness,

c) encircling the structure (T) to be climbed with the first end segment (L') of said lanyard line (L), and coupling the associated first coupler means (54) at the end of said first end segment (L') of the lanyard line to the first connector means (50) of said safety harness (48),

10 whereby,

d) manipulating the first lanyard line segment (L') upwardly on the structure (T) while climbing the structure until a lateral obstruction (B) is encountered,

e) encircling the structure (T) above the obstruction with the second end segment (L'') of the lanyard line and coupling the associated second coupler member (56) to

15 said first connector member (50) and detaching said first coupler member (54) therefrom to release the first end segment,

f) manipulating the second lanyard segment (L'') upwardly on the structure above the obstruction (B) to continue climbing the structure, and

g) repeating steps d), e) and f), for alternate lanyard end segments, as required,

20 to reach a desired height on the structure.